

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1 1-20. (Canceled)
- 1 21. (Previously Presented) A method for providing printer recognition and
2 management of a print job entity, comprising:
 - 3 establishing a repository of attributes and status information associated with each
4 print job that passes through a printer system;
 - 5 providing an interface to a plurality of components to allow access to the attributes
6 and status information in the repository by the plurality of components; and
 - 7 establishing a job monitor for managing the repository of attributes and status
8 information associated with each print job, for responding to a call by a printer component
9 and for managing interactions between printer components in order to control the processing
10 of the job.

1 22. (Previously Presented) An apparatus for providing printer recognition
2 and management of a print job entity, comprising:
3 a repository of attributes and status information associated with each print job that
4 passes through a printer system;
5 an interface to a plurality of components, the interface providing access to the
6 attributes and status information in the repository by the plurality of components; and
7 a job monitor for managing the repository of attributes and status information associated with
8 each print job, for responding to a call by a printer component and for managing interactions
9 between printer components in order to control the processing of the job. .

1 23. (Previously Presented) The apparatus of claim 22, wherein the interface
2 provides an ability for components to process a job according to requirements of the
3 component and reports job attributes and processing status of the job for common access by
4 other components.

1 24. (Previously Presented) The apparatus of claim 22, wherein the interface
2 provides a component access to common variables, the components presenting job attributes
3 or status to the interface.

1 25. (Previously Presented) The apparatus of claim 22, wherein the a
2 repository and interface are provided by a job monitor, the job monitor further providing
3 logical views to obtain a next job to be processed by a component and to obtain a list of all
4 jobs in the order that they are processed.

1 26. (Previously Presented) The apparatus of claim 22, wherein the job

2 monitor is used to update attributes of print jobs.

1 27. (Previously Presented) The apparatus of claim 26, wherein the job

2 monitor determines a next job to process, the component determining valid states for a call.

1 28. (Previously Presented) The apparatus of claim 27, wherein the job

2 monitor includes a multiplexor, and wherein the valid states for a multiplexer further

3 comprise:

4 an unknown state for when a job identification is requested; and

5 a pull print queue state for the job when the job is stop-flowed at a port connection

6 manager waiting for access to the printer because a print engine is processing another job;

7 wherein the multiplexer receives the job and selects to place the job in a job must be

8 spooled state, a may spool state or must print state.

1 29. (Previously Presented) The apparatus of claim 28, wherein the

2 multiplexer routes the incoming job to the print engine or the spooler according to which

3 becomes available first when the job is a job that may spool.

1 30. (Previously Presented) The apparatus of claim 22 further comprising a

2 spooler.

1 31. (Previously Presented) The apparatus of claim 30, wherein the spooler
2 receiving a job identification request, enters a not spooled state when the spooler has not yet
3 processed the job, enters a spooling, can despool state when the job is being written to the
4 spool device thereby allowing the job to be selected for despooling at any time, enters a
5 spooling, despooling state when the job is being written to the spool device and is also being
6 read from the spool device, enters a waiting to despool state when the end of the job has been
7 received, enters a despooling state when the job is being read from the spool device and
8 written to the multiplexer and enters the done state when the job is finished being processed
9 by the spooler.

1 32. (Previously Presented) The apparatus of claim 22 further comprising an
2 interpreter.

1 33. (Previously Presented) The apparatus of claim 32, wherein the
2 interpreter enters a waiting for data state when job processing by the interpreter has started,
3 enters an interpreting state when the job is being processed by the interpreter and enters a
4 done state when the job is finished being processed by the interpreter.

1 34. (Previously Presented) The apparatus of claim 22, wherein the a
2 repository and interface are provided by a job monitor, the job monitor further handling
3 incoming jobs with a port connection manager, wherein the port connection manager calls to
4 a multiplexer to process the job.

1 35. (Previously Presented) The apparatus of claim 22, wherein the a
2 repository and interface are provided by a job monitor, the job monitor further deciding
3 whether to assign a job to the printer, whether to assign a job to a spooler, whether the job
4 must wait for available resources or whether the job cannot be processed.

1 36. (Previously Presented) The apparatus of claim 22 further comprising a
2 job monitor to fetch jobs in an order that is dependent upon the calling component.

1 37. (Previously Presented) The apparatus of claim 36 further comprising a
2 job monitor for examining process job states and variables to determine the correct response
3 and to return an appropriate job identification for a job.

1 38. (Previously Presented) The apparatus of claim 22 further comprising a
2 job monitor for providing a common method of accessing the variables associated with a job
3 for the components.

1 39. (Previously Presented) An article of manufacture comprising a program
2 storage medium readable by a computer, the medium tangibly embodying one or more
3 programs of instructions executable by the computer to perform a method for providing
4 printer recognition and management of a print job entity, the method comprising:
5 establishing a repository of attributes and status information associated with each
6 print job that passes through a printer system;
7 providing an interface to a plurality of components to allow access to the attributes
8 and status information in the repository by the plurality of components; and
9 establishing a job monitor for managing the repository of attributes and status
10 information associated with each print job, for responding to a call by a printer component
11 and for managing interactions between printer components in order to control the processing
12 of the job.

1 40-81. (Canceled)